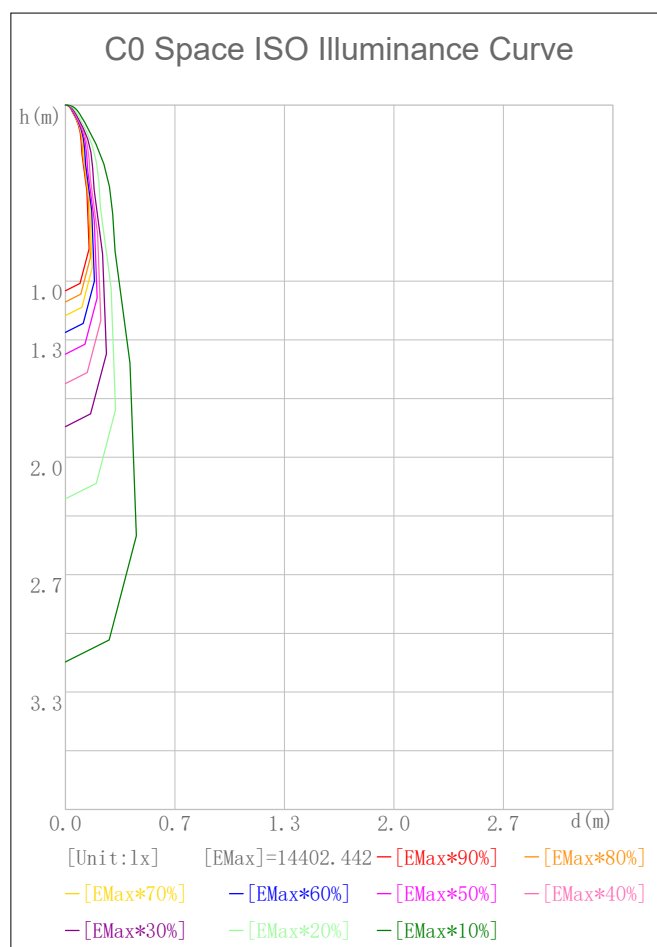
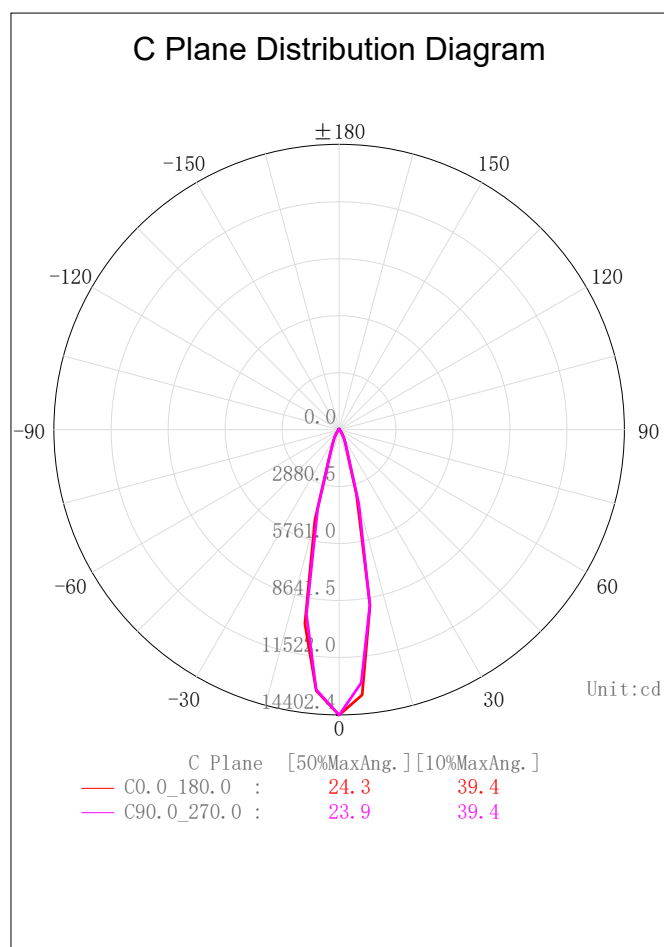


Description Information

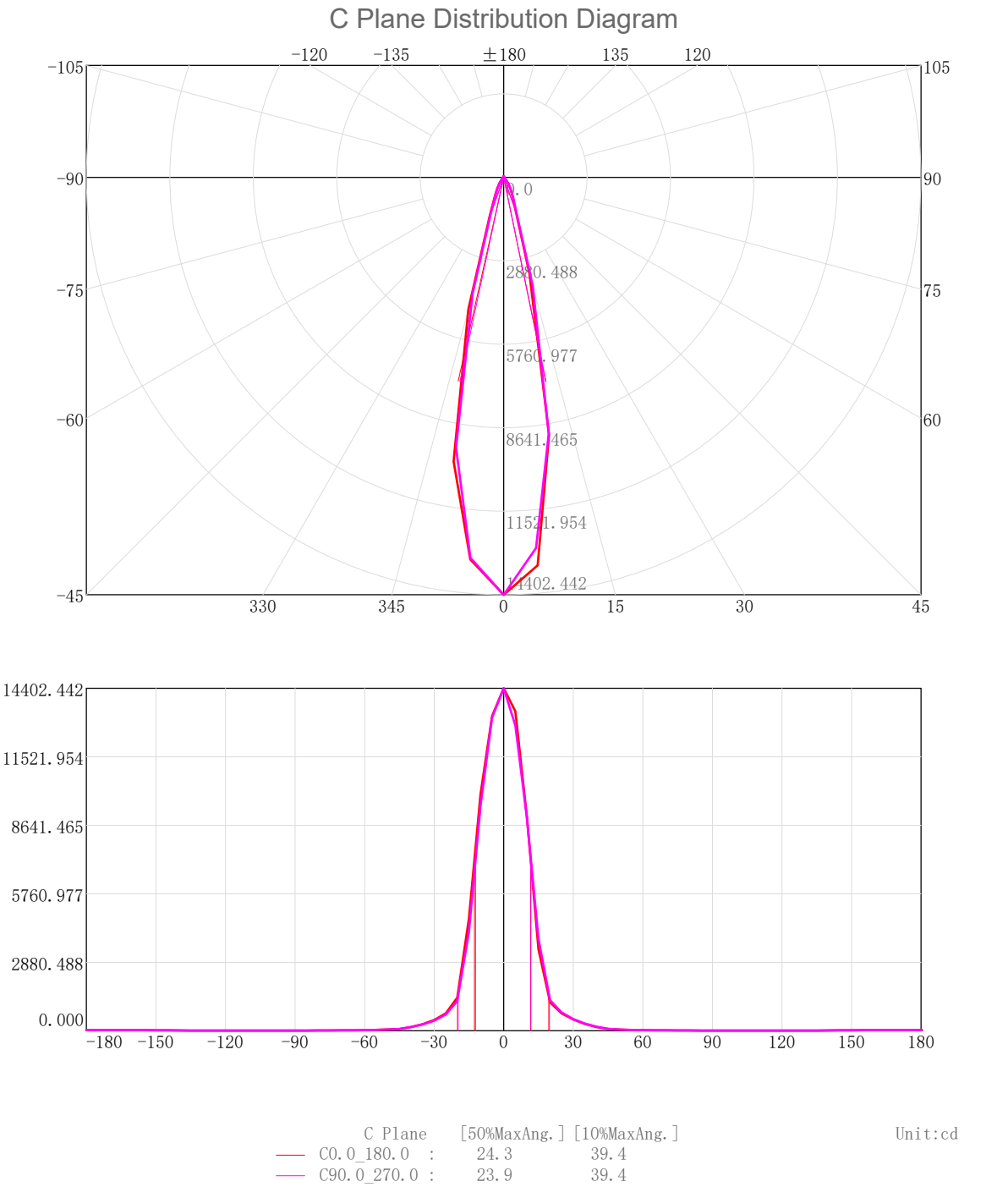
Luminary Name: DL51-35-XX-01 4000K RA90 24D 电镀亮黑		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/23
Manufacture: Shenzhen Norming Lighting		Shld. Ang(°):	Test Machine:GON-2000
Test Lab: Quality Department		Frequency(Hz):	Lamp CCT(K): Ra:
Lum. Size(W*L*H):0.110m*~0.110m*0.000m		Lum. Area(m2):0.010	Lum. W(kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 3170.550	Luminary Flux(lm): 3170.554	Field Angle(10%Imax): 39.4(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 3083.702lm 97.26%
Rated Voltage(V):	Luminary EER(lm/W): 94.166	Up Lumens&Percent: 86.851lm 2.74%
Tested Power(W): 33.670	Max. Candela(cd): 14402.442	S/MH: C0_a180=0.415 C90_270=0.408
Lamps' Inside: 1	Max. Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics(V, A, pf):239.7, 0.146, 0.960	Beam Angle(50%Imax): 24.3(°)	ErP φuse(90°): 2981.920lm
Lamp Size(W*L*H):0.110m*-0.110m*0.000m	Left=-12.6° ,Right=11.6°	IRF(%) : 1020.582



2D Plane Light Intensity Distribution Curve

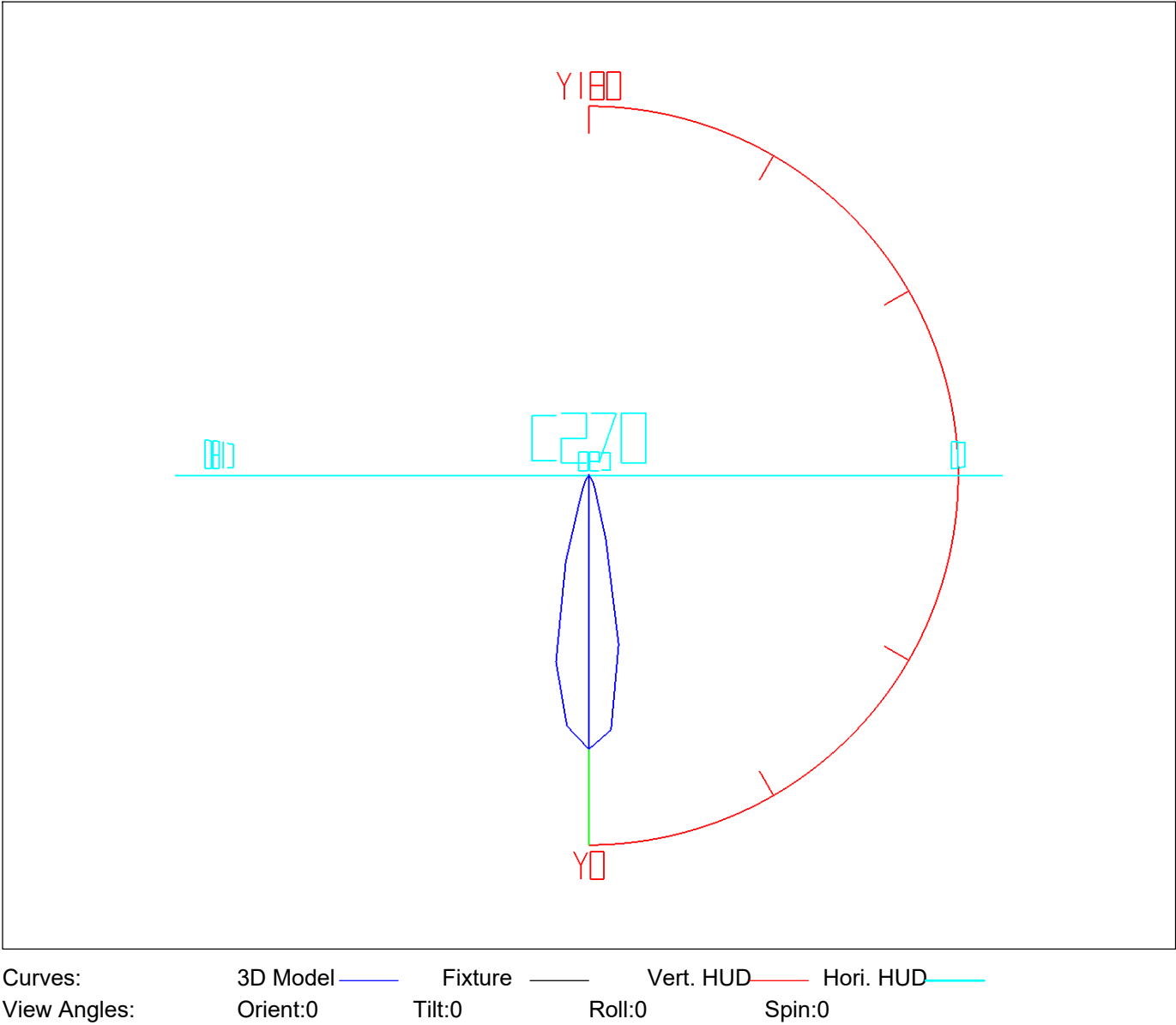
Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

3D Light Intensity Distribution Modal

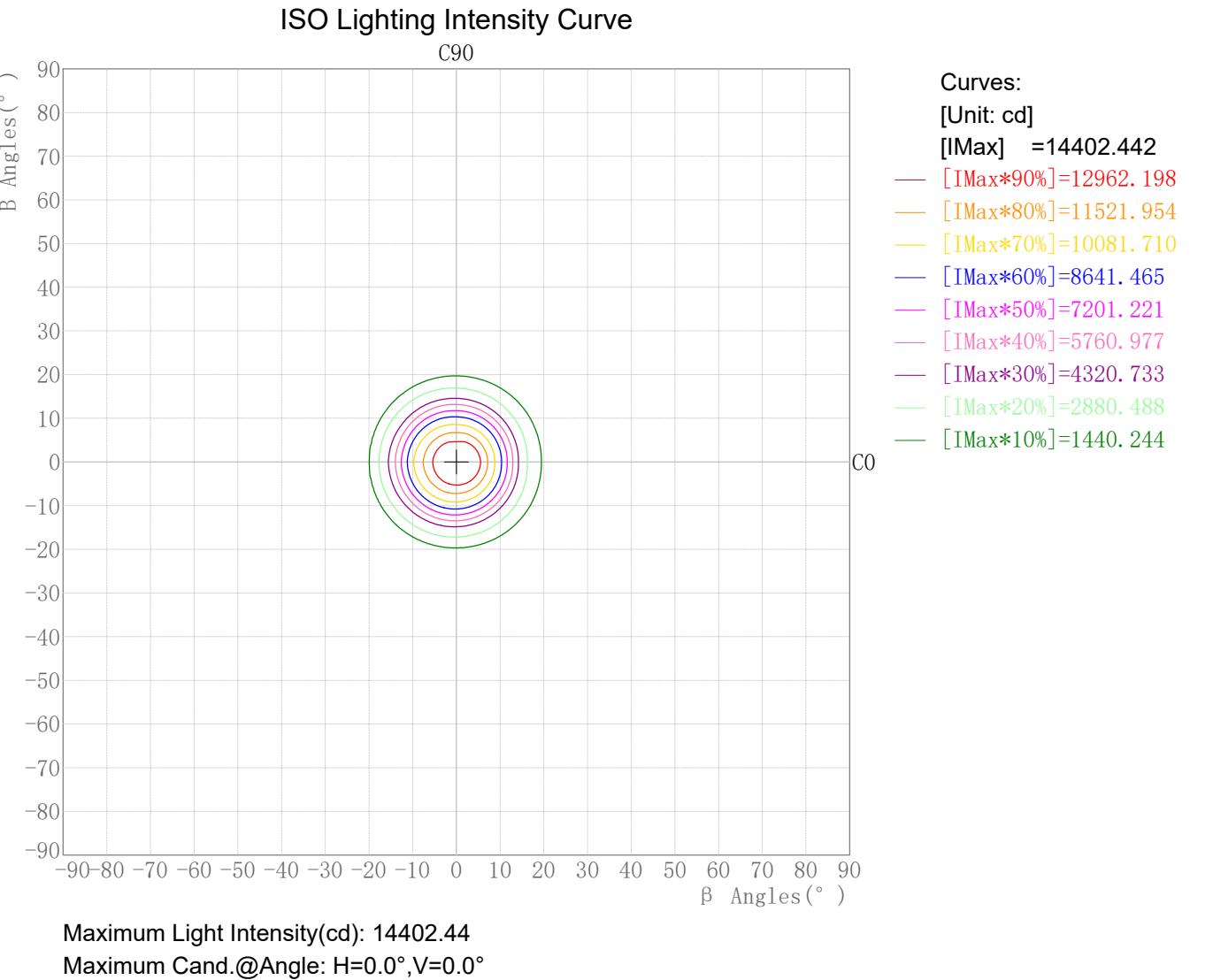


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	329.60	329.60	10.40	10.40
5.0-10.0	805.61	1135.21	25.41	35.80
10.0-15.0	794.34	1929.55	25.05	60.86
15.0-20.0	438.56	2368.11	13.83	74.69
20.0-25.0	211.34	2579.45	6.67	81.36
25.0-30.0	151.50	2730.95	4.78	86.13
30.0-35.0	110.40	2841.35	3.48	89.62
35.0-40.0	74.85	2916.20	2.36	91.98
40.0-45.0	45.12	2961.32	1.42	93.40
45.0-50.0	27.64	2988.96	0.87	94.27
50.0-55.0	20.31	3009.27	0.64	94.91
55.0-60.0	15.45	3024.72	0.49	95.40
60.0-65.0	13.20	3037.92	0.42	95.82
65.0-70.0	11.54	3049.45	0.36	96.18
70.0-75.0	10.16	3059.61	0.32	96.50
75.0-80.0	8.99	3068.61	0.28	96.78
80.0-85.0	7.98	3076.59	0.25	97.04
85.0-90.0	7.12	3083.70	0.22	97.26
90.0-95.0	6.39	3090.09	0.20	97.46
95.0-100.0	5.89	3095.98	0.19	97.65
100.0-105.0	5.45	3101.43	0.17	97.82
105.0-110.0	5.08	3106.52	0.16	97.98
110.0-115.0	4.81	3111.32	0.15	98.13
115.0-120.0	4.56	3115.89	0.14	98.28
120.0-125.0	4.41	3120.29	0.14	98.41
125.0-130.0	4.49	3124.79	0.14	98.56
130.0-135.0	4.90	3129.69	0.15	98.71
135.0-140.0	5.61	3135.29	0.18	98.89
140.0-145.0	6.31	3141.60	0.20	99.09
145.0-150.0	6.61	3148.21	0.21	99.30
150.0-155.0	6.36	3154.57	0.20	99.50
155.0-160.0	5.61	3160.18	0.18	99.67
160.0-165.0	4.55	3164.73	0.14	99.82
165.0-170.0	3.27	3168.00	0.10	99.92
170.0-175.0	1.92	3169.92	0.06	99.98
175.0-180.0	0.63	3170.55	0.02	100.00

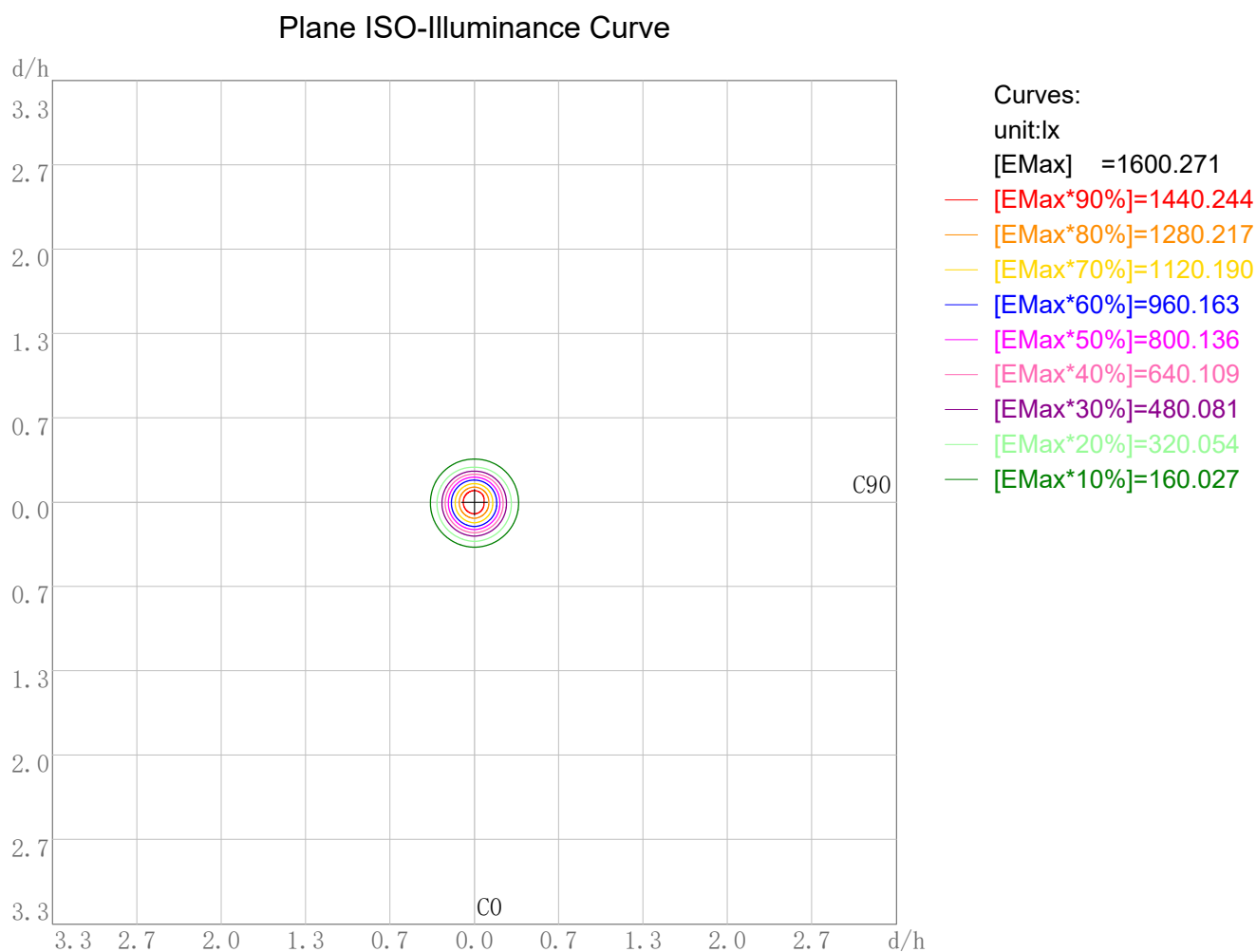
Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Photometric Filename:DL51-35-XX-01 4000K RA90 24D 电镀亮黑.IES

Lum. Name: DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

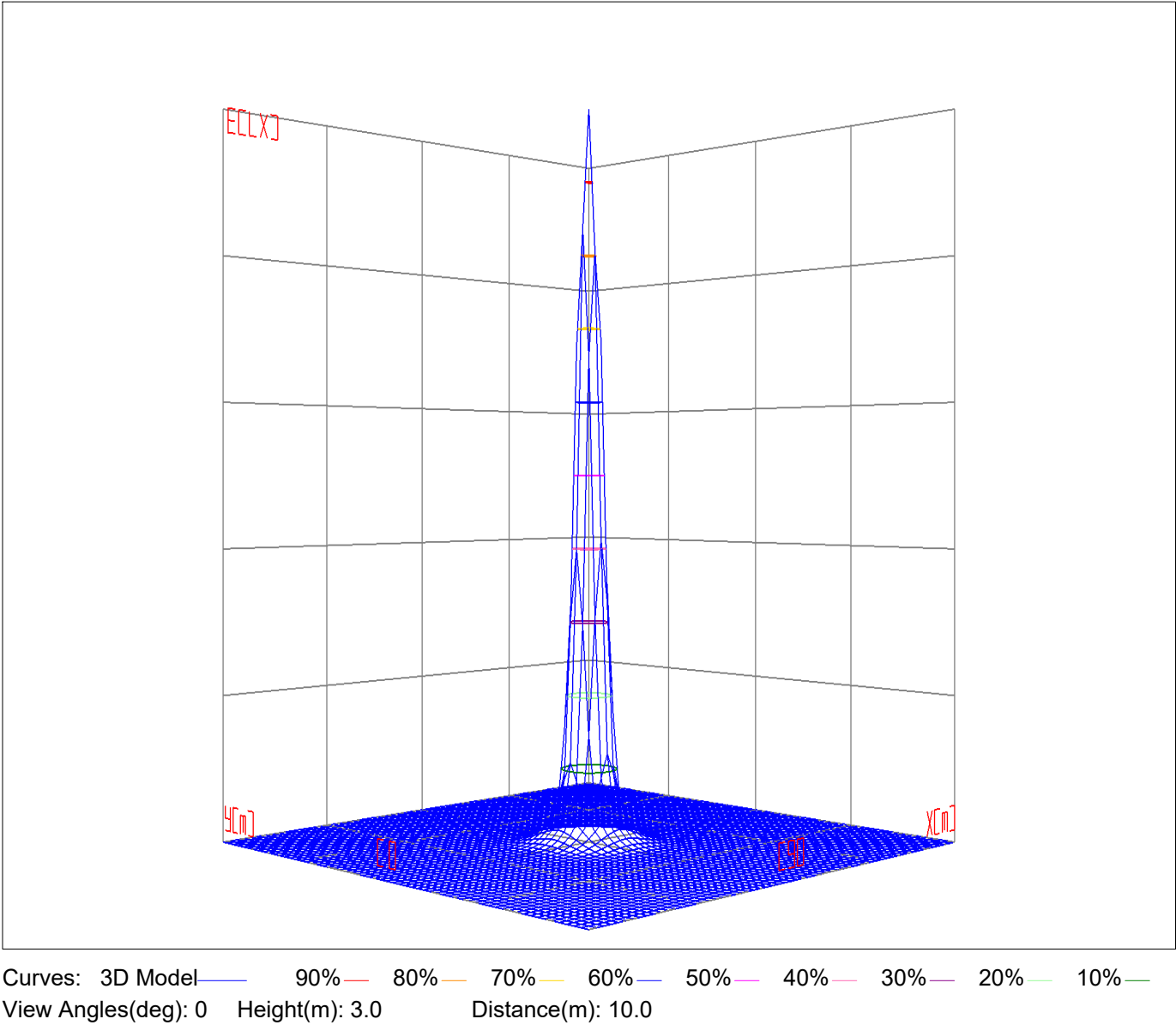


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 1600.27
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

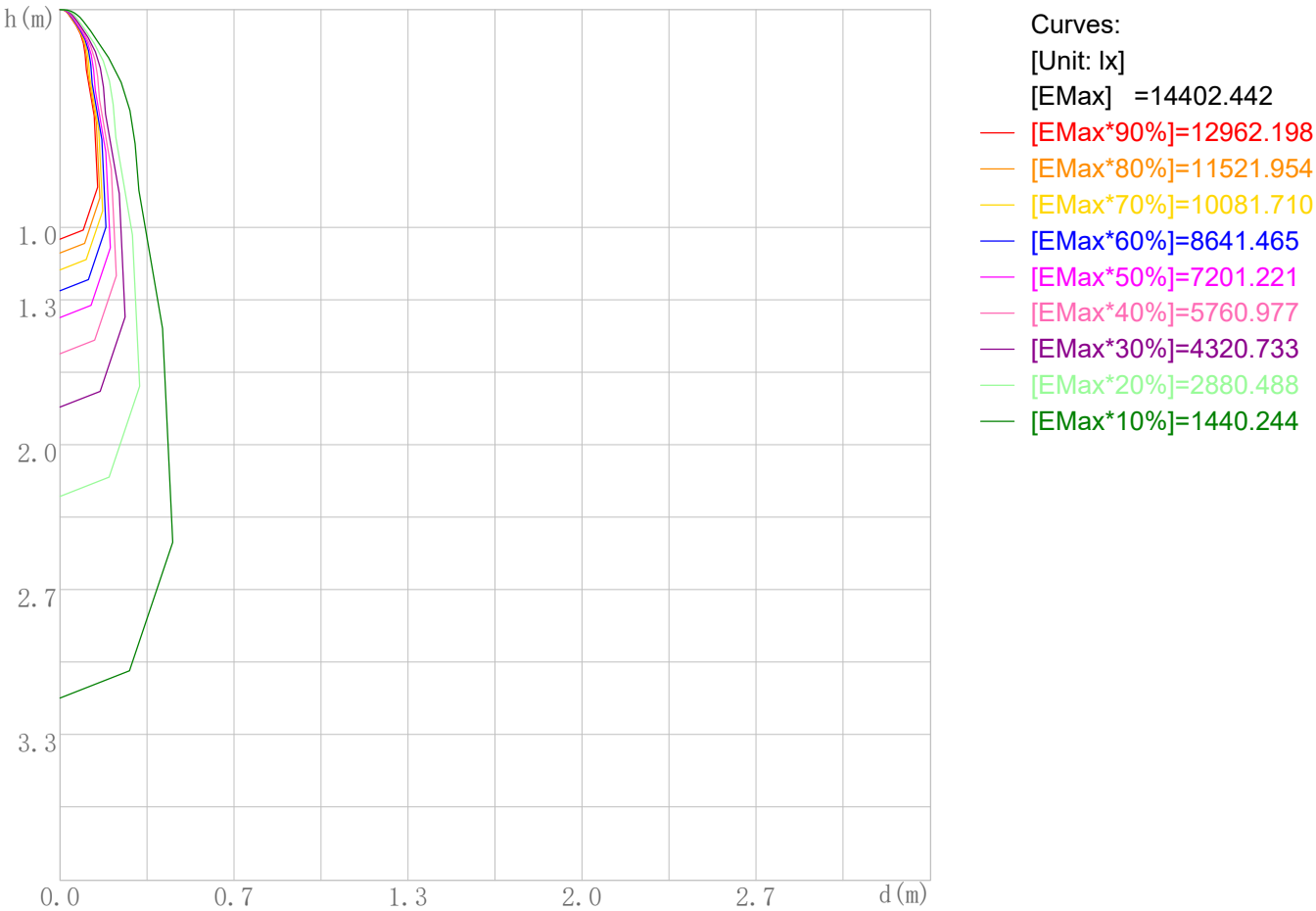
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

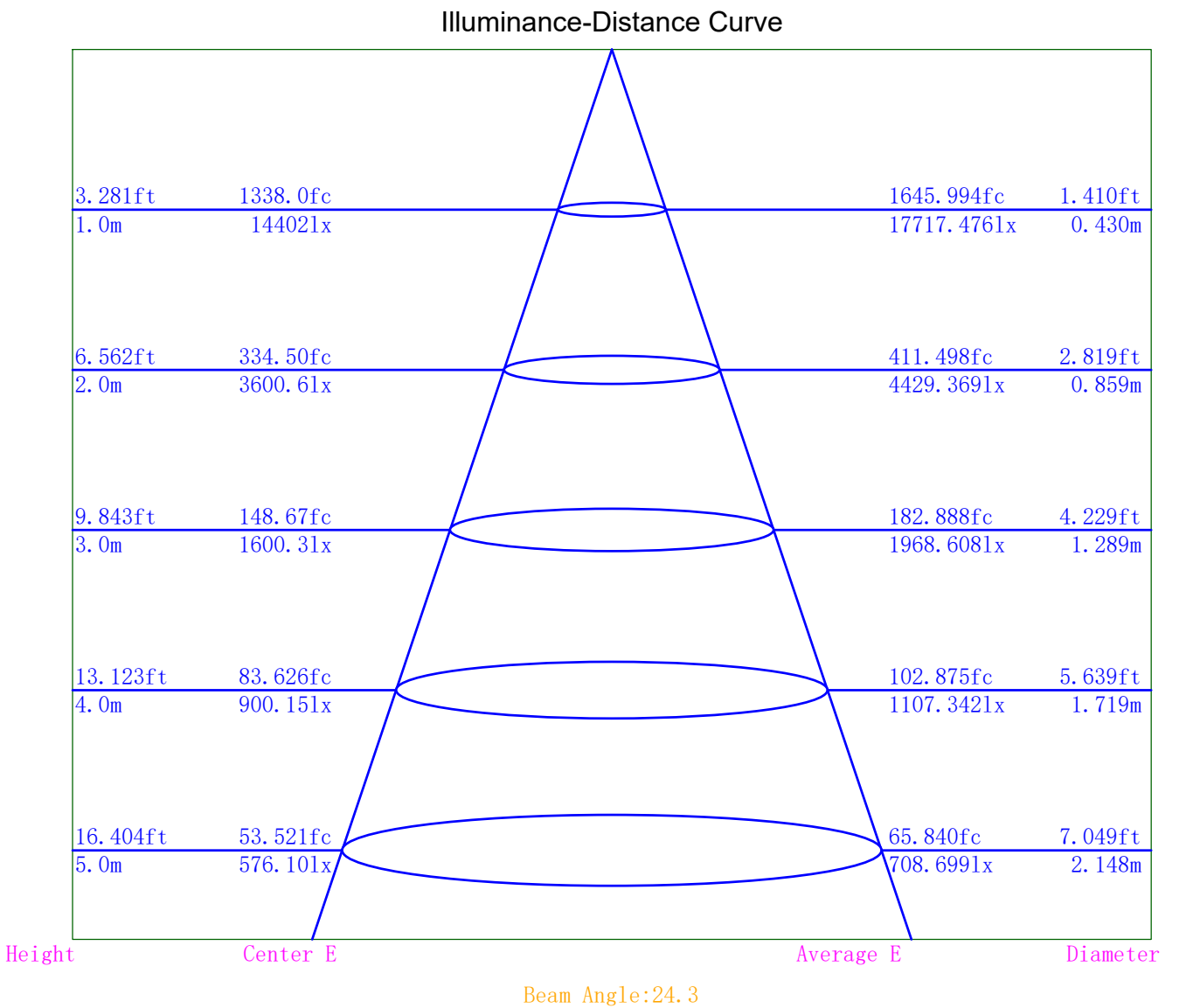
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:14402.44lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:14402.442cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

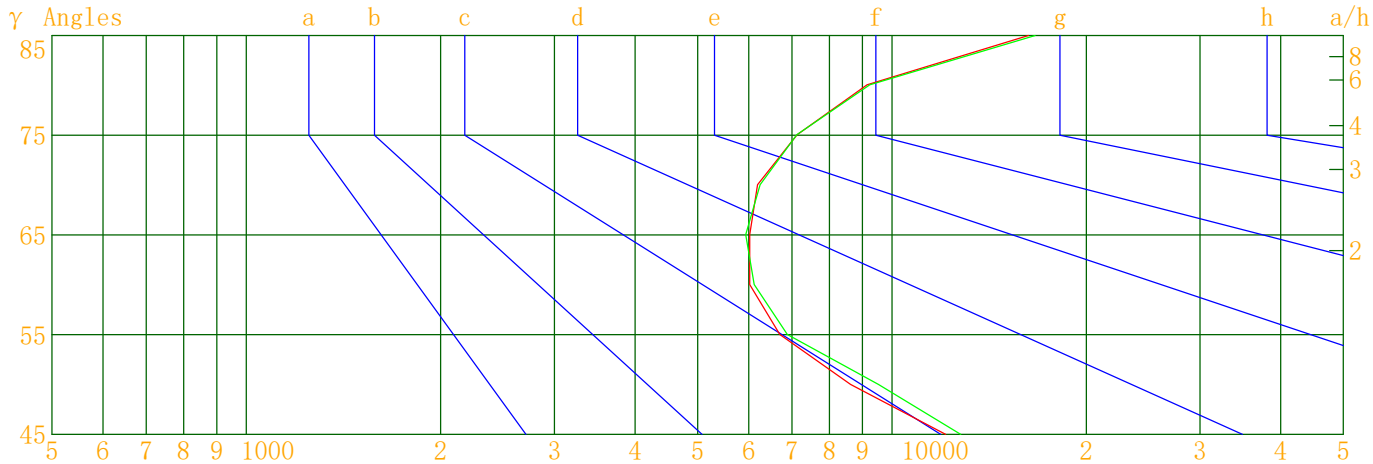
Glare Grade Table

GI	Quality	Using Illuminance							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E	a				2000	1000	500	<=300
			b	c	d	e	f	g	h

Luminance Table

Gama(deg)	45	50	55	60	65	70	75	80	85
C0	12108	8627	6704	6022	6022	6190	7130	9150	16266
C90	12776	9526	6887	6119	5936	6250	7120	9241	16659

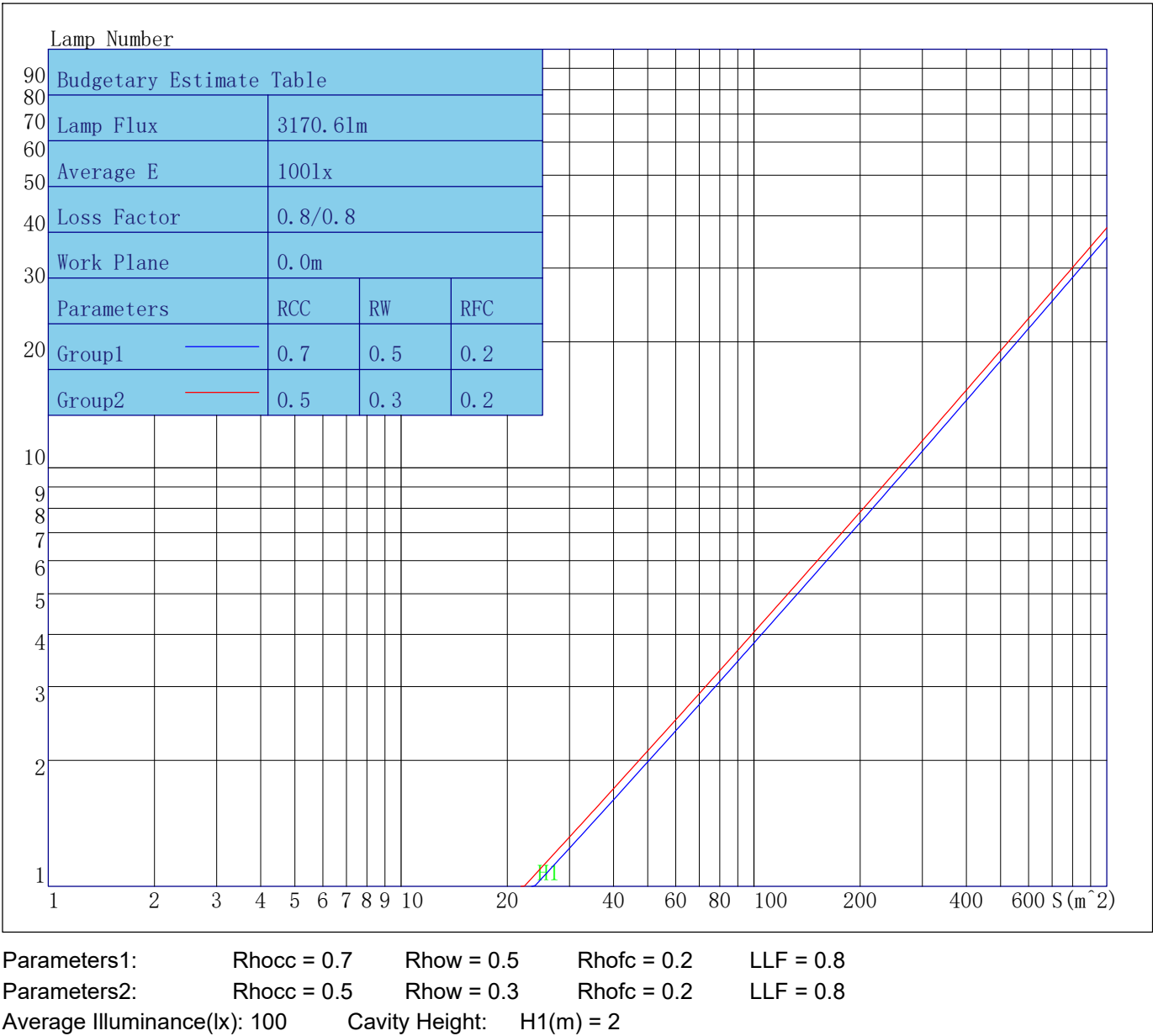
Luminance Limiting Curve



Luminous Size: Length(m)=-0.110 Width(m)=-0.110 Height(m)=0.000 Area(m^2)=0.009503
Luminous Type: Without Luminous Side
Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

Coefficients of Utilization - Zonal Cavity Method																		
Coef.	Effective Floor Cavity Reflectance RFC=0.20																	
RhoCC (%)	80				70				50			30			10			0
RhoW (%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	Coefficient of Utilization(%)																	
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	114	111	109	107	111	109	107	105	104	103	102	100	99	98	97	96	95	93
2	110	106	102	99	107	104	101	98	100	98	96	97	95	93	94	92	91	89
3	106	101	97	93	104	99	95	92	96	93	91	93	91	89	91	89	87	86
4	102	96	92	89	100	95	91	88	93	89	87	90	88	85	88	86	84	83
5	99	92	88	85	97	91	87	84	89	86	83	88	85	82	86	83	81	80
6	96	89	84	81	94	88	84	81	86	83	80	85	82	79	83	81	79	77
7	93	86	81	78	91	85	81	78	84	80	77	82	79	77	81	78	76	75
8	90	83	79	76	89	82	78	75	81	78	75	80	77	75	79	76	74	73
9	88	81	76	73	87	80	76	73	79	75	73	78	75	72	77	74	72	71
10	85	78	74	71	84	78	74	71	77	73	71	76	73	70	75	72	70	69

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 4000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

Unified Glare Rating Table

Ceiling RCC		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
Wall RW		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Floor RFC		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room Size		Vewed crosswise					Vewed endwise				
X=2H	Y=2H	13.8	14.7	14.2	15.1	15.5	14.1	15.0	14.5	15.4	15.7
	Y=3H	14.3	15.1	14.8	15.5	16.0	14.6	15.4	15.0	15.8	16.2
	Y=4H	14.8	15.5	15.2	15.9	16.4	15.0	15.7	15.4	16.1	16.6
	Y=6H	15.3	16.0	15.8	16.5	16.9	15.5	16.2	16.0	16.6	17.1
	Y=8H	15.7	16.4	16.2	16.8	17.3	15.9	16.5	16.4	17.0	17.5
	Y=12H	16.3	16.9	16.7	17.3	17.8	16.4	17.0	16.9	17.5	18.0
X=4H	Y=2H	13.8	14.6	14.3	15.0	15.4	14.1	14.8	14.5	15.2	15.7
	Y=3H	14.6	15.2	15.1	15.7	16.2	14.8	15.4	15.3	15.9	16.4
	Y=4H	15.2	15.8	15.7	16.3	16.8	15.4	16.0	15.9	16.4	16.9
	Y=6H	16.1	16.6	16.6	17.1	17.6	16.2	16.7	16.8	17.2	17.7
	Y=8H	16.6	17.1	17.2	17.6	18.1	16.8	17.2	17.3	17.7	18.2
	Y=12H	17.3	17.7	17.9	18.3	18.8	17.5	17.8	18.0	18.4	18.9
X=8H	Y=4H	15.5	15.9	16.0	16.4	17.0	15.6	16.1	16.2	16.6	17.1
	Y=6H	16.6	16.9	17.2	17.5	18.1	16.7	17.1	17.3	17.6	18.2
	Y=8H	17.3	17.6	17.9	18.2	18.8	17.4	17.7	18.0	18.3	18.9
	Y=12H	18.3	18.6	18.9	19.1	19.8	18.4	18.7	19.0	19.2	19.9
X=12H	Y=4H	15.5	15.9	16.1	16.4	17.0	15.7	16.0	16.2	16.6	17.1
	Y=6H	16.8	17.1	17.3	17.6	18.2	16.9	17.2	17.4	17.7	18.3
	Y=8H	17.6	17.9	18.2	18.4	19.1	17.7	18.0	18.3	18.5	19.2
Variations with the objverver position at spacings											
S=1.0H		0.1/-0.1					0.1/-0.1				
S=1.5H		0.1/-0.2					0.1/-0.2				
S=2.0H		0.1/-0.1					0.1/-0.1				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		3.1					3.0				

o the CIE Pub.117,data has been corrected,refers to the lamp's lumens 8.2flm.

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	14402.4	14402.4	14402.4	14402.4
γ 5.0	13437.4	12834.2	13230.4	13171.2
γ 10.0	9023.2	8970.9	9948.2	9464.1
γ 15.0	3427.8	3865.6	4711.0	4153.1
γ 20.0	1194.6	1286.7	1391.9	1254.9
γ 25.0	735.7	772.7	734.2	689.7
γ 30.0	476.5	495.2	455.8	428.9
γ 35.0	292.4	306.9	277.1	266.1
γ 40.0	157.1	177.4	159.2	158.3
γ 45.0	81.4	85.9	78.9	76.6
γ 50.0	52.7	58.2	57.5	56.1
γ 55.0	36.5	37.5	37.9	37.2
γ 60.0	28.6	29.1	30.6	30.0
γ 65.0	24.2	23.8	25.5	25.3
γ 70.0	20.1	20.3	21.5	21.4
γ 75.0	17.5	17.5	18.4	18.6
γ 80.0	15.1	15.3	16.0	16.0
γ 85.0	13.5	13.8	13.9	14.0
γ 90.0	12.1	12.3	12.3	12.1
γ 95.0	11.3	11.5	10.8	11.0
γ 100.0	10.6	11.2	10.1	10.2
γ 105.0	10.3	10.4	9.4	9.3
γ 110.0	10.4	9.9	8.9	9.1
γ 115.0	9.3	9.6	9.1	9.5
γ 120.0	9.1	9.6	9.4	9.5
γ 125.0	9.6	9.1	9.9	10.3
γ 130.0	10.6	10.9	11.1	11.2
γ 135.0	13.3	12.7	13.2	13.9
γ 140.0	16.9	16.0	17.2	18.0
γ 145.0	20.4	20.3	20.9	21.6
γ 150.0	23.9	23.5	24.5	24.3
γ 155.0	26.4	25.8	26.5	26.0
γ 160.0	27.4	26.9	28.0	27.1
γ 165.0	28.2	27.6	28.4	27.3
γ 170.0	27.1	27.1	27.9	27.0
γ 175.0	26.4	26.5	26.7	26.4
γ 180.0	26.4	26.4	26.4	26.4